

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NEW YORK

W.R. GRACE & CO. – CONN.,

Plaintiff,

v.

DECISION AND ORDER
98-CV-838S

ZOTOS INTERNATIONAL, INC.,

Defendant.

I. INTRODUCTION

This case involves agreements and transactions among two companies—Defendant Zotos International, Inc. (“Zotos”), and Evans Chemetics, Inc. (“ECI”)—as they relate to the disposal of hazardous substances. The disposal at issue occurred between 1950 and 1959 (the “Disposal Period”) at a five-acre parcel of land on Brewer Road in Waterloo, New York. ECI purchased the Brewer Road property (“the Site”) in 1950 to use as a dumping ground for a nearby production facility. Plaintiff W.R. Grace & Co.–Conn. (“Grace”) acquired the Site in 1978, when it purchased the assets of ECI.

Grace commenced this action on December 30, 1998, seeking to recover, under 42 U.S.C. § 9613(f)(1), costs it incurred to investigate and remediate contamination at the Site. Grace claimed that Zotos had arranged for the disposal of hazardous substances there and so was liable, under CERCLA, to contribute its fair share of the cleanup costs.

In May 2004, the Court conducted a seven day trial to address two questions: 1) did Zotos arrange for the disposal of waste products at the contaminated site at any time between 1950 and 1959, and, if so, 2) did the products for which Zotos arranged disposal contain any hazardous substance. The parties filed post-trial memoranda, proposed findings of fact and conclusions of law, and memoranda concerning evidentiary objections

reserved at trial.

Soon afterward, the United States Supreme Court issued its decision in Cooper Industries, Inc. v. Aviall Services, Inc., which held that a private party that has not been sued in a CERCLA administrative or cost recovery action cannot obtain contribution from other liable parties under CERCLA's section 113(f)(1), 42 U.S.C. § 9613(f). 543 U.S. 157, 125 S. Ct. 577, 160 L. Ed. 2d 548 (2004). The parties filed additional briefing directed to this issue. In light of Cooper Industries, the Court found, on May 3, 2005, that Grace could not maintain its contribution claim under section 113(f), and entered judgment in favor of Zotos.¹ W.R. Grace & Co. v. Zotos Int'l, Inc., 2005 U.S. Dist. LEXIS 8755 (2005); Docket No. 206.

On appeal, Grace argued for the first time that, if it could not seek contribution from Zotos under sections 113(f)(1) or (f)(3)(B), it was entitled to cost recovery under CERCLA's section 107(a), 42 U.S.C. § 9607(a). W.R. Grace & Co. v. Zotos Int'l, Inc., 559 F.3d 85, 86 (2d Cir. 2009). The Second Circuit affirmed the district court's section 113(f) analysis, but remanded the action so that Grace could, instead, bring a claim for cost recovery under section 107(a). Id. at 96.

Thereafter, on May 15, 2009, Grace filed its Second Amended Complaint claiming that Zotos is liable for cleanup costs under section 107(a). (Docket No. 218.) Zotos filed an Answer, which includes a Counterclaim for contribution under section 113(f). (Docket No. 219.) The parties later filed supplemental briefs and closing arguments, and the matter was deemed submitted on November 13, 2012. (Docket Nos. 221-25, 229-30, 232-33.)

¹ For separate reasons, the Court also concluded Grace could not seek contribution under section 113(f)(3)(B), which Grace first asserted post-trial as an alternative basis for recovery.

What follows are the legal standards applicable to Grace's current claims, the Court's rulings on evidentiary issues raised at trial, and findings of fact and conclusions of law on the issue of liability, in accordance with Rule 52 of the Federal Rules of Civil Procedure.

II. APPLICABLE LEGAL STANDARDS

Under CERCLA, property owners such as Grace "are strictly liable for the hazardous materials on their property, regardless of whether or not they deposited them there." Niagara Mohawk Power Corp. v. Chevron U.S.A., Inc., 596 F.3d 112, 120 (2d Cir. 2010). CERCLA does, however, allow owners of polluted property to seek reimbursement for their cleanup costs from other potentially responsible parties ("PRPs"). Id. Three separate provisions allow for such relief in specific circumstances, sections 107, 113(f)(1), and 113(f)(3)(B). As noted, the Second Circuit affirmed that Grace cannot obtain contribution under the latter two provisions, but remanded the action so that Grace could bring a claim for the recovery of cleanup costs under section 107.

Unlike section 113, section 107 is a "strict, joint, and several liability remedy." New York v. Solvent Chem. Co., 685 F. Supp. 2d 357, 423-24 (W.D.N.Y. 2010), *rev'd in part on other grounds*, 2011 U.S. App. LEXIS 25067 (2d Cir. Dec. 19, 2011). Therefore, Zotos now has asserted a section 113(f) counterclaim for cost apportionment, in the event it is found liable. United States v. Atlantic Research Corp., 551 U.S. 121, 138, 140, 127 S. Ct. 2331, 168 L. Ed. 2d 28 (2007) (CERCLA permits a party sued for cost recovery under § 107(a) to assert a counterclaim for contribution under § 113(f)(1), effectively converting the action to one for apportionment of liability).

To establish Zotos's liability under section 107(a), Grace must demonstrate five

elements: (1) the Brewer Road Site is a “facility” as defined in 42 U.S.C. § 9601(9); (2) there has been a release or threatened release of hazardous substances at Brewer Road; (3) Grace incurred costs responding to the release or threatened release; (4) at least some of the response costs were “necessary” and consistent with the National Contingency Plan (“NCP”) within the meaning of § 9607(a)(4)(B); and (5) Zotos fits within one of the four classes of responsible parties outlined in § 9607(a). Bedford Affiliates v. Sills, 156 F.3d 416, 427 (2d Cir. 1998); B.F. Goodrich v. Murtha, 958 F.2d 1192, 1198 (2d Cir. 1992).

The parties have stipulated to the first four elements. (SF² ¶¶ 2-5.) Thus, the only question at this liability stage is whether Zotos is a potentially responsible party (“PRP”) from which Grace can recover costs. Grace maintains Zotos is liable as an “arranger,” defined as “any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility or incineration vessel owned or operated by another party or entity and containing such hazardous substances.” 42 U.S.C. § 107(a)(3).

To make its case for the imposition of arranger liability, Grace must show that: (1) Zotos owned or possessed materials that were disposed of or treated, (2) those materials contained hazardous substances, and (3) Zotos arranged to dispose of or treat the materials, or to transport them for disposal or treatment. The parties have stipulated to the remaining elements for arranger liability—*i.e.*, that Zotos is a “person” within the meaning of CERCLA, and that the disposal site was not owned or operated by Zotos. (SF ¶¶ 1, 19-

² “SF” refers to Docket No. 136, the parties’ “Stipulations of Facts” not in dispute at trial.

21.)

III. OBJECTIONS TO EXHIBITS AND TESTIMONY

The Court provisionally accepted trial exhibits and testimony to which objections were raised, and requested post-trial briefing on the objections. The Court's rulings on the matters reserved at trial are as follows.

A. Zotos's Objections to Grace's Proof

1. Cost Allocation Documents, Exs. 344, 346, 348, 350, 357, 358, 375, 376.

These exhibits, all created in and after 1961, concern either the allocation of costs between ECI and Zotos (Exs. 344, 346, 348, 350) or between production facilities in Waterloo and Geneva, New York (357, 358, 375, 376). Zotos contends the exhibits are irrelevant and inadmissible because they post-date the time period at issue and, in any event, do not pertain to costs associated with the activities at issue here—*ie.*, the salvage and disposal of Zotos products. In response, Grace has withdrawn Exhibit Nos. 357, 358, 375, and 376, but maintains the remaining exhibits refer to a method of allocating general, administrative, and manufacturing expenses between Zotos and ECI that is relevant because “[t]here has been no change in the method of allocating certain types of expenses since 1957.” (Docket No. 186 at 3, quoting D. Ex. 346.) According to Grace, these documents provide information about practices that existed during at least part of the Disposal Period and are relevant to show how Zotos paid for services rendered by ECI, including the salvage and disposal of Zotos products.

Zotos's objections to exhibits 344, 346, 348, and 350 are overruled. Rule 401 of the Federal Rules of Evidence defines relevant evidence as “evidence having any tendency

to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.” Federal Rule of Evidence 406 provides that “[e]vidence of . . . the routine practice of an organization . . . is relevant to prove that the conduct of the . . . organization on a particular occasion was in conformity with the . . . routine practice.” The Court finds these exhibits are relevant to the accounting policies and practices existing during at least the period 1957 through 1959, and are admissible.

2. Trips to Waterloo or Geneva, Exs. 345, 347, 359, 361, 362, 364.

These exhibits are memos, dated February 7, 1961 and later, regarding activities at the Waterloo Plant. Zotos argues that they all are dated outside the Disposal Period and are not probative of any practice or policy relating to the salvage or disposal of Zotos products. Grace has withdrawn exhibit 362, but maintains all other exhibits are relevant to Zotos policies regarding customer returns, including the types of products for which returns were authorized.

Zotos’s objections to exhibits 345, 347, 359, 361, and 364 are overruled. A number of trial exhibits dated prior to, during, and after the Disposal Period discuss Zotos’s acceptance of customer returns and/or identify the types of products returned. Grace alleges that returned Zotos products are among those disposed of at Brewer Road. Evidence concerning customer returns, dated shortly after the Disposal Period, is admissible and may be probative of Zotos’s routine policies or practices, as well as the identity of products that may have been disposed of at Brewer Road. See, W.R. Grace & Co. v. Zotos Int’l, Inc., 2004 U.S. Dist. LEXIS 31262, at *3-5 (W.D.N.Y. May 14, 2004) (citing Lewis v. Baker, 526 F.2d 470 (2d Cir. 1975) (courts have repeatedly upheld the

relevance of conditions existing prior to and after pertinent time period to questions about the state of affairs at a particular time)).

3. Officers and Directors of ECI and Zotos in the 1960s, Exs. 365, 366, 368, 369, 377, 395 (partial), 396 (partial)³.

Zotos objects to these exhibits on the ground the trial record clearly establishes the identity of ECI and Zotos officers and directors during the Disposal Period, and the identity of individuals who held those positions in subsequent years is of no relevance. Grace maintains that each exhibit is reflective of the “interlocking management” that existed prior to, during, and after the Disposal Period.

Zotos’s objections to these full and partial exhibits are sustained, as Grace has not identified, nor can the Court discern, any link between the identity of officers and directors after 1959 and any fact of consequence to the questions presented here—*ie.*, whether Zotos arranged for the disposal of wastes containing hazardous substances at Brewer Road at any time from 1950 to 1959. The exhibits do not speak to any policies, practices, or decisions that might make a pertinent fact more or less likely.

4. A 1967 Transfer of Business Operations, Exs. 369, 370, 372, 373.

These documents relate to a transaction, effective January 1, 1967, whereby Zotos took over the operation of a plant in Geneva, New York from ECI. Zotos requests the exhibits be excluded because Grace has not alleged that any waste from the Geneva plant was disposed of at Brewer Road, and this transaction occurred many years after the Disposal Period.

³ Zotos does not object to 395 and 396 to the extent they list officers and directors prior to 1960.

Grace has withdrawn exhibit 372. It contends, however, that exhibits 369 and 370 relate to whether Zotos and ECI engaged in arms-length transactions, and exhibit 373 relates to the portion of ECI's overall production devoted to Zotos products.

Zotos's objections are sustained and the exhibits are excluded. First, these documents are dated seven years after the end of the Disposal Period and do not pertain to company policies, practices, or decision making. To the extent exhibits 369 and 370 may evidence a close financial relationship between Zotos and ECI, Grace has not explained their relevance to determining whether Zotos arranged with ECI for waste disposal in the 1950s, and whether the materials disposed of contained hazardous substances. As for exhibit 373, to the extent the volume of goods manufactured for Zotos arguably has some relationship to the volume of waste deposited at Brewer Road, such facts go to the question of apportionment, not liability.

5. Hair Care Production Moved from Waterloo to Geneva, Exs. 352, 363

Exhibit 352 contains portions of a consultant's 1962 report recommending, among other things, that the formulation of Zotos products be relocated from the Waterloo Plant, where ECI also engaged in bulk chemical production. Exhibit 363, dated March 24, 1964, confirms that the relocation of Zotos production to a separate site (from Waterloo, N.Y. to Geneva, N.Y.) was then essentially complete. Zotos seeks to exclude the exhibits on the ground they do not pertain to waste disposal or salvage operations in Waterloo in the 1950s. Grace contends the consultant's report is relevant because it discusses the companies' "interlocking management," and also because both exhibits confirm ECI continued to formulate Zotos products after the Disposal Period. The Court finds these exhibits are not relevant because they do not pertain to disposal at Brewer Road, to any

policies or practices that may have existed during the relevant period, or to particular products or substances that may have been produced and discarded during the Disposal Period. Accordingly, Zotos's objections to these exhibits are sustained.

6. The Transfer of Alcohol Permits in 1967, Exs. 371 and 374.

Grace has withdrawn exhibit 371, but contends that exhibit 374 is relevant because it identifies Zotos formulas dated in the 1940s and 1950s that were still in production in 1966. It is offered as evidence tending to establish that these products were manufactured during the Disposal Period. This is relevant to the question of whether waste related to specific products was likely disposed of at Brewer Road. Thus, Zotos's objection on the ground the exhibit lacks relevance is overruled.

7. Exhibit 304

Exhibit 304, dated October 12, 1945, lists products then included in Zotos's "cosmetic line." Zotos objects on the ground the document lacks authentication and is not relevant. Zotos produced this document from its historic business records, and does not point to any aspect of its condition that would arouse suspicion about its authenticity. The document had existed for approximately 60 years when it was offered at trial. Accordingly, the Court finds it meets the criteria for self-authentication under Rule 901(b)(8).

Grace contends the exhibit is relevant because it tends to show the array of products Zotos may have continued to distribute at the beginning of the Disposal Period. The Court agrees, and Zotos's objections are overruled. As with all relevant exhibits created outside the Disposal Period, the Court will need to evaluate the exhibit's persuasiveness, but that is a question of weight, not admissibility.

8. Exhibit 342

This memo, dated December 14, 1960, pertains to the allocation of shipping costs between Zotos and ECI. Zotos argues for exclusion because the memo does not pertain to the salvage or disposal of Zotos products. But, this exhibit does relate to cost accounting between these companies which, if reflective of a policy or practice, may be relevant to determining their respective financial obligations in other operations, as well. Accordingly, Zotos's objection is overruled.

9. Exhibit 343

Zotos contends this Price Waterhouse report, dated January 12, 1961, is irrelevant. The memo contains recommendations for improving accounting policies and practices that existed in 1960 and prior. Among other things, it refers to credits for returned goods, and matching inventory levels to Zotos requirements. In short, the memo relates to relevant policies and practices existing during and immediately after the Disposal Period, and Zotos's objection is overruled.

10. Exhibit 349

This memo, dated June 1, 1961, is a request by Zotos that ECI resolve a shipping delay about which Zotos had received customer complaints. According to Grace, this exhibit tends to show that, even when products were shipped by ECI from its facility, Zotos is the entity that communicated with customers and addressed their concerns. Because this may be probative of the handling of customer product complaints or requests to make returns, Zotos's objection is overruled.

11. Exhibit 351

In this memo, dated March 15, 1962, ECI recommends that Zotos eliminate certain

of its less popular products that require small, inefficient production runs. Zotos argues that the document, created nearly three years after the end of the Disposal Period, does not address any matter of significance. Grace contends, and the Court agrees, that the companies' respective decisionmaking roles and practices shortly after the Disposal Period are admissible for purposes of establishing policy or custom during the relevant time period. This document may be probative of decision making and control over inventory and product discontinuance. Thus, Zotos's objection is overruled.

12. Exhibit 367

This July 22, 1965 memo reports on a trip to the Geneva plant. Zotos objects to its introduction on the grounds it was prepared long after the Disposal Period ended, does not pertain to the Waterloo Plant, and is not relevant to issues to be determined here. Among other things, the writer opines that Zotos then had a "liberal return policy." Because there is no information about the substance or operation of the policy, the memo does not tend to show it is more or less likely that a particular return policy or business practice existed in the 1950s. Therefore, the memo is not relevant and Zotos's objection is sustained.

13. Exhibit 378

Zotos objects to these July 25, 1968 committee meeting minutes on the ground they were created nearly a decade after the Disposal Period and have no bearing on the issue of waste disposal in the 1950s. Grace points to the Product and Packaging Control Committee's recommendation that Zotos grant ECI's request to dispose of packaging material stored at the Waterloo Plant, and argues this is evidence of routine practices whereby Zotos controlled disposal decisions. Evidence of the companies' routine business practices outside the Disposal Period may tend to show that the same practices existed

during the relevant period. Therefore, Zotos's objection is overruled.

14. Testimony of Theodore Covert

Mr. Covert began employment at Zotos in or about October 1965. Zotos objects to 13 of the 20 passages of deposition testimony designated by Grace, arguing they pertain to events outside the Disposal Period that have no bearing on the ultimate issues here. Zotos did not brief, and apparently has withdrawn, one of its objections. Grace has withdrawn two of its designated passages. The remaining ten are addressed below.

a. 14:4-15:6

Mr. Covert was asked to identify the positions held by various individuals in November 1966. Grace contends the testimony tends to show the "extraordinary interlocking management" of ECI and Zotos. As was the case with certain exhibits above, Grace has not explained the significance of the companies' purportedly close business relationship, nor has it linked this very general characterization to any fact of consequence to determining whether Zotos arranged for the disposal of hazardous waste at Brewer Road during the period 1950 through 1959. Because the titles held by individuals in 1966 have no apparent relevance to waste disposal in the 1950s, Zotos's objection is sustained and this testimony excluded.

b. 24:1-11

Mr. Covert was asked whether any changes occurred in New York City when Zotos assumed operation of the Geneva plant in January 1967. Grace's argument that this testimony is relevant to the "interconnectedness" of Zotos and ECI is rejected for the reason stated in III(A)(14)(a).

c. 25:14-26:16

Here Mr. Covert testified that, in 1966, Zotos, ECI, and a third company, Evans Research and Development (“ER&D”), had offices on different floors of the same building in New York City. Grace’s argument that this testimony is relevant to the “interconnectedness” of Zotos and ECI is rejected for the reason stated in III(A)(14)(a).

d. 27:14-28:14

This testimony relates to minutes from a January 27, 1967 Joint Administrative Committee meeting Mr. Covert had attended. He was asked to identify the topics typically discussed at such meetings. Grace’s argument that this testimony is relevant to the “interconnectedness” of Zotos and ECI is rejected for the reason stated in III(A)(14)(a). Moreover, the Court is not persuaded it can reasonably assume, as Grace contends, that committees from the 1950s, bearing different names and with different members, served the same purposes as did the Joint Administrative Committee in 1967.

e. 29:3-23

This passage relates to a change in administrative functions that diminished the need to allocate expenses between Zotos and ECI. In addition to its “interconnectedness” argument, Grace contends this is proof that prior allocation policies remained in place from the end of the Disposal Period to 1967. Because the continuation of policies after the Disposal Period is not relevant to the issues in this case, Zotos’s objection is sustained.

f. 31:1-32:25

This testimony is similar to the prior passage in that it discusses a change in the allocation of administrative expenses for the Geneva plant after January 1967. For the reasons stated above, it is not relevant to whether Zotos arranged for the disposal of waste

at Brewer Road from 1950 to 1959, and is, therefore, excluded.

g. 70:10-71:18

Mr. Covert was asked whether, prior to 1967, one company ever paid for services performed for it by another company's employees. He identified two services that Zotos may have provided to ECI—legal and human resources. Grace contends that, absent evidence of any change in business practices prior to 1967, this testimony tends to show that ECI and Zotos provided services to one another and billed one another for those services during the Disposal Period. As noted above, evidence of business practices outside the pertinent time period is probative of questions regarding a party's practice or custom during the time at issue. This testimony is therefore relevant, and Zotos's objection is overruled.

h. 74:21-76:3

Mr. Covert testified that, prior to 1967, the New York City laboratory employees who designed inspection methods and quality control procedures used in formulating hair care products first worked for ER&D and later for Zotos. Grace argues the testimony is consistent with proof that the "relationship was similar" during the Disposal Period. For the same reasons given for rejecting all other claims of relevance based on "interconnectedness" or the generalized existence of a "relationship," Zotos's objection is sustained and this testimony is excluded.

i. 77:14-78:9

Here, Mr. Covert testified that, prior to 1967, at the Geneva Plant, ECI would take samples from a production batch of Zotos product and retain them for the period of time designated by Zotos's legal department. Grace contends, and the Court agrees, that this

testimony is probative of practices and decisionmaking authority that may have existed when ECI formulated Zotos products at the Waterloo Plant—*i.e.*, during the Disposal Period. Accordingly, the objection to this passage is overruled.

j. 78:20-79:7

Mr. Covert testified that, after 1967, if Zotos received a customer request to return products, Zotos would give the customer a return authorization if it determined the request was justified or rational. He further stated that he did not know what happened prior to 1967. Zotos contends the testimony is irrelevant because it relates only to 1967 and later. The Court disagrees. Covert describes a business practice which, though outside the Disposal Period, is probative of whether the same or a similar practice existed during the relevant period.

15. Testimony of Frances Erskine

Mrs. Erskine, a chemist, commenced employment at ER&D in 1956. The five passages to which Zotos objects, 25:8-25, 26:6-24, 27:5-29:2, 29:10-21, and 31:20-25, pertain to three trips Mrs. Erskine took in 1965 to the Geneva plant, where ER&D was paid to operate the testing laboratory. Zotos contends this testimony has no bearing on procedures and practices in place during the Disposal Period or to the disposal of Zotos waste. According to Grace, Erskine's visits to Geneva evidence the "interconnected management" of Zotos, ECI, and ER&D. For the same reasons the Court has rejected Grace's other claims of relevance based on "interconnectedness" or the generalized existence of a "relationship," Zotos's objection is sustained and this testimony is excluded.

B. Grace's Objections to Zotos's Proof

Grace objects to a number of Zotos exhibits—512, 518, 525, 530, 531, 532, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 548, 555, 558, 566, 567, and 568—on the ground that, if they are relevant at all, they go to the question of apportionment, not Zotos's liability “as an arranger of hazardous substances found in discarded beauty products disposed at the Site.” (Docket No. 186 at 19.) Grace further contends their admission will likely cause distraction, confusion, and unfair prejudice. Grace objects to certain of Zotos's designated deposition testimony on substantially the same grounds. It also argues that a significant portion of the testimony relates to the 1960s and 1970s, well past the Disposal Period at issue here.

Zotos maintains the challenged exhibits and testimony are offered to rebut Grace's inferences that Zotos products are the source of hazardous substances found at the Site, and so, are relevant to the question of its liability.

Having reviewed the exhibits and testimony at issue, the Court finds as follows.

1. General Operations at the Waterloo Plant

Because ECI produced bulk chemicals for the beauty industry as well as for other purposes, ECI's chemical production necessarily intersects with its formulation of hair care products, at least to some degree. Several of the exhibits to which Grace objects pertain to general operations at the Waterloo Plant during the relevant time period, including ECI's formulation of beauty products for Zotos and private label brands. Given the broad scope of these documents, all dated within the Disposal Period, the Court finds they may be relevant to policies or practices then in existence, or to particular Zotos products that may have been produced and discarded during that time. Because such issues are pertinent

to questions presented at this liability stage, Grace's objections to the following exhibits are overruled: Ex. 512 (Dec. 6, 1955 report on facilities and activities at Waterloo Plant, including at neighboring dump); Ex. 518 (June 20, 1956 meeting minutes discussing general operations, including Zotos production requirements); Ex. 539 (Oct. 14, 1958 general report on Waterloo Plant); 540 (July 14, 1959 general report on Waterloo); Ex. 541 (June 16, 1959 general report on Waterloo); Ex. 542 (May 19, 1959 general report on Waterloo); Ex. 543 (July 7, 1958 general report on Waterloo), Ex. 555 (Nov. 9, 1954 discussion of ECI sales policies relating to Zotos, private label business, and chemicals).

2. Documents Related to the Production of Hair Care Products

Certain exhibits to which Grace objects relate in whole, or in large part, to ECI's sale or use of chemicals for formulating hair care products. Grace maintains that hair care products ECI compounded for Zotos at Waterloo are the primary source of contamination at the Brewer Road Site. Therefore, exhibits pertaining to hair care ingredients and production during the Disposal Period are relevant to the question of Zotos's liability, and Grace's objections to the following are overruled: Ex. 525 (1958 document listing ECI products offered for sale and discussing use of ECI's thioglycolic acid, also known as T-acid, in formulation of permanent wave products); Ex. 544 (Dec. 11, 1956 document pertaining to projected Zotos sales for 1957); Ex. 548 (May 6, 1958 document regarding ECI's sale to other hair care manufacturers of products developed by Zotos).

3. ECI Chemical Production

Zotos has identified a number of exhibits that list ECI bulk chemicals offered for sale or that discuss ECI's bulk chemical production at Waterloo during the Disposal Period: Ex. 530 (May 5, 1958 document discussing chemical order from Johnson Wax Company); Ex.

531 (May 5, 1958 document discussing financial/space issues related to bulk chemical production); Ex. 532 (June 13, 1958 inventory of ECI chemicals); Ex. 534 (Apr. 2, 1958 report on chemical sales and laboratory developments); Ex. 535 (Feb. 27, 1958 report on chemical production and sales promotion); Ex. 536 (Dec. 31, 1957 report on sales promotion and laboratory developments); Ex. 537 (Nov. 18, 1957 report on laboratory work); Ex. 538 (July 1, 1957 report on production problems in England); Ex. 545 (Nov. 22, 1957 report on development of procedure for chemical compounding); Ex. 558 (June 6, 1955 status report on “non-cosmetic chemicals”); Ex. 566 (Sept. 21, 1959 list of chemical names and their structural formulas); Ex. 567 (Aug. 5, 1958 report on cost reduction developments); Ex. 568 (report of chemical production in 1956). None of these exhibits refer to Zotos, the formulation of hair care products, or waste disposal.

Zotos contends that, should Grace offer proof that Zotos products containing hazardous substances were disposed of at Brewer Road, ECI’s use of the same substances for non-cosmetic applications is pertinent to whether hazardous substances found at the Site derive from Zotos products. Under the legal standards set forth above, Grace need not show that Zotos’s waste is the source of hazardous substances released into the environment at Brewer Road in order to establish Zotos’s liability. It is sufficient to show that Zotos waste transported to Brewer Road contained one or more hazardous substances. That there may be other sources for a particular hazardous substance detected at the Site goes to the question of apportionment, not liability. Accordingly, Grace’s objections to the introduction of these documents at the liability phase are sustained, and the exhibits are excluded.

4. Testimony of Thomas Desiderio

Mr. Desiderio was employed by ECI as a chemist in Waterloo beginning in 1974. Of the five passages of testimony originally in dispute, Zotos has withdrawn one passage, and Grace has withdrawn its objection to another.

a. 20:9-23

Mr. Desiderio was asked about the use of purified powder copper in chemical production in the 1970s. Zotos contends that evidence of ECI's use of copper, even long after the Disposal Period, "undercuts Grace's claim that copper was found in Zotos products" at the Site. (Docket No. 184 at 16.) Because ECI's use of copper for other applications has no bearing on whether copper was an ingredient in Zotos products disposed of at the Site, Grace's objection is sustained and this testimony is excluded.

b. 35:9-36:12

This testimony relates to the use of zinc in ECI's bulk chemical production in the 1970s. According to Zotos, such testimony tends to increase the probability that zinc found at the Site came from ECI manufacturing waste, rather than Zotos products. Again, ECI's use of zinc has no bearing on the question of Zotos's potential liability for the alleged disposal of products at Brewer Road containing zinc. Accordingly, the testimony is not relevant at this stage, and is excluded.

c. 38:16-23

This testimony, which pertains to ECI's use of ammonium bisulfate in the 1970s is excluded for the same reasons as the prior passages.

5. Testimony of James DiCicco

Mr. DiCicco commenced employment for ECI at Waterloo in 1956. He began

working full-time in the beauty product compounding department in 1958 and then, sometime after 1964, worked in the organic chemical production area. Grace objects to three passages of testimony on the ground that DiCicco does not have personal knowledge of chemical production operations during the Disposal Period, and Zotos has not shown that operations after 1964 were similar to those in the 1950s.

a. 42:18-43:16

Here, DiCicco was asked about chemicals appearing on a 1958 ECI inventory list. Zotos maintains the testimony is offered for the purpose of confirming that ECI manufactured certain specified chemicals in 1958, within the Disposal Period. As discussed above, the identity of chemicals produced for non-cosmetic applications has no bearing on the question of Zotos's potential liability for allegedly arranging the disposal of products containing hazardous substances. Because the testimony is not relevant at this liability phase, it will be excluded.

b. 46:21-49:8

Mr. DiCicco was asked about wastes generated by ECI in its chemical manufacturing operations. Zotos urges this testimony is relevant because it tends to show it is more likely that wastes identified at the Brewer Road Site are attributable to ECI, rather than Zotos. The fact that a particular hazardous substance found in soil and water samples at the Site may have come from multiple sources or a different source entirely goes to the question of apportionment, not liability. Because this testimony does not pertain to the question of Zotos's liability, Grace's objection is sustained.

c. 52:4-54:17

Here, Mr. DiCicco testified about the manufacture of mercaptropionic acid and the handling of its wastes and byproducts. Among other things, he stated that a particular hazardous byproduct found at the Brewer Road Site was never used in the formulation of hair care products. This testimony is relevant to the question of Zotos's liability and the objection is, therefore, overruled.

6. Testimony of Francis Erskine 57:11-64:1

Ms. Erskine, a chemist, commenced employment at ER&D in 1956. From 1956 to 1960, she worked in ER&D's hair care department on the development and testing of permanent waving lotions and shampoos. The disputed testimony pertains to the raw materials used in the manufacture of various hair care products. Grace objects to this passage on the ground Ms. Erskine's testimony goes beyond products she worked on, and includes conditioners, hair sprays, and setting lotions of which she could not have had contemporaneous personal knowledge. The Court declines to accept Grace's conclusion that a chemist working in the development of hair care products could not have knowledge of hair care formulas she did not work on directly. Because this testimony is relevant to the possible composition of Zotos hair care products during at least part of the Disposal Period, Grace's objection is overruled.

7. Testimony of John Jeffers (7/8/99)

Mr. Jeffers was employed at ECI's Waterloo Plant beginning in 1954. Grace objects to four passages of testimony on the ground that, if the testimony is relevant at all, it goes to the question of apportionment, not Zotos's liability as an arranger of hazardous substances found in discarded beauty products disposed at the Site.

a. 33:13-16

In this passage, Mr. Jeffers identifies the area of the plant to which he was assigned in the 1950s. Because this information may be pertinent as a foundation for further testimony or evidence, Grace's objection is overruled.

b. 61:1-71:9

Mr. Jeffers was asked about ECI's use of solvents found in the environment at the Brewer Road Site. Among other things, he stated that solvents were not used in the manufacture of shampoos and conditioners. Because this testimony is relevant to the possible composition of Zotos hair care products during at least a portion of the Disposal Period, Grace's objection is overruled.

c. 101:2-102:7 and 104:1-19

In these passages, Mr. Jeffers testified that ECI's use of zinc as a reducing agent in chemical production resulted in zinc waste. The fact that a particular hazardous substance found in soil and water samples at the Site may have come from multiple sources or a different source entirely goes to the question of apportionment, not liability. Because this testimony does not pertain to the question of Zotos's liability, Grace's objection is sustained.

8. Testimony of Samuel Williams

a. 22:25-28:25, 32:15-33:21, 42:14-43:12, and 46:2-46:9

Mr. Williams began employment as a chemist at ER&D in 1950. In 1952, he moved to ECI, where he worked on chemical development and sales. In these four passages of deposition testimony, Mr. Williams discusses ECI's use of zinc as a reducing agent in the manufacture of various bulk chemicals. Grace objects on the ground that evidence of

chemical production wastes are not relevant to the question of Zotos's alleged liability as an arranger for the disposal at Brewer Road of discarded beauty products containing hazardous substances. The Court agrees and Grace's objections are sustained.

b. 98:9-16

Grace raises the same objection to this final passage of Williams's testimony as to all others. Here, Mr. Williams was asked to identify the person at Waterloo responsible for determining the quantity of hair care products to be produced. Zotos contends this is relevant to the question of which entity had control over the production of Zotos products. The Court agrees that questions of decision making and control are pertinent to the issue of liability. Accordingly, Grace's objection, which is unrelated to the subject matter of this testimony, is overruled.

* * * * *

To the extent any exhibit or testimony to which an objection raised at trial is not discussed here, either the exhibit/testimony has been withdrawn, or the objection was not briefed and is deemed withdrawn.

IV. FINDINGS AND CONCLUSIONS⁴

A. The Relationship Between Zotos and ECI

Prior to and during the Disposal Period, Defendant Zotos⁵ was in the business of formulating, packaging, and distributing hair care and beauty products. (SF 23; J. Ex. 107, at 1⁶). On January 26, 1942, Zotos purchased a former woolen mill located on Main Street in Waterloo, New York (“the Waterloo Plant”) (J. Ex. 101 at 59), and began formulating and packaging hair care and cosmetic products there (SF ¶ 23). In July 1943, Zotos leased a portion of its Waterloo Plant to ECI. (SF ¶ 25; J. Exs. 102 at 22; 152 at 4.) ECI was in the business of manufactured organic compounds, some of which were used in formulating hair care products. (J. Ex. 152 at 4; P. Ex. 383 at 1.) Prior to leasing manufacturing space at Waterloo, ECI had been formulating certain hair care products for Zotos in bulk elsewhere, which Zotos then packaged and distributed to its customers. (J. Exs. 101 at 53, 80-81; 102 at 6; 104.)

It appears Zotos and ECI first entered into a contractual relationship regarding the formulation of certain Zotos products in 1940. At that time, ECI had a single stockholder,

⁴ The Court has elected to issue its findings in narrative form. As the district court in Appleton Papers, Inc. v. George A. Whiting Paper Co., No. 08-C-16, 2012 WL 2704920 (E.D. Wis. July 3, 2012) aptly noted, such a method is appropriate in large cases where separately numbered findings “can prove cumbersome,” especially where “the questions posed involve mixed questions of law and fact” 2011 WL 2704920, at *1. In this circuit, separately stated findings of fact and conclusions of law are not necessary under Rule 52(a). See Krieger v. Gold Bond Bldg. Products, 863 F.2d 1091, 1097 (2d Cir. 1988) (“[N]othing in the Rules requires either punctilious detail or slavish tracing of the claims issue by issue and witness by witness.”) (internal quotation marks and alterations omitted).

⁵ During the time period at issue, Defendant operated under the name of Sales Affiliates, Inc. Sales Affiliates changed its name to Zotos International, Inc. on or about November 1, 1969. (SF ¶¶ 9-11.) For the sake of clarity, the Court will refer to Defendant corporation only as Zotos.

⁶ Trial exhibits are identified as either a Joint Exhibit (“J. Ex.”), Plaintiff’s Exhibit (“P. Ex.”) or Defendant’s Exhibit (“D. Ex”). “Tr.” refers to the trial transcript.

Dr. Ralph L. Evans. (J. Ex. 102 at 1, 4.) Throughout the time period at issue here, Dr. Evans continued as the sole owner of all ECI voting stock. (J. Ex. 140 at Ex. A.) ECI's later issued common stock was, at all relevant times, held by Dr. Evans and members of his immediate family. (J. Ex. 102 at 18; P Ex. 301.) In 1940, Zotos stock was owned by just two shareholders, one of whom was Dr. Evans. (J. Ex. 138.) Dr. Evans became the controlling Zotos shareholder in 1943, its president in 1946, and the sole shareholder in 1953.⁷ (J. Exs. 101 at 64, 68, 84; 141 and 150.)

During a portion of the Disposal Period, from at least 1957 through 1959, Dr. Evans was the President and controlling shareholder of yet another corporation, Evans Research and Development, Inc. (SF ¶¶ 15, 18.) From at least 1957 through 1959, ER&D, in turn, held the controlling shares of both Zotos and ECI. (Id. ¶¶ 16-17.)

B. The Unification Plan

In 1945, Dr. Evans, acting on behalf of Zotos, proposed that Zotos and ECI unify their operations at the Waterloo Plant as a means of lowering Zotos's production costs. (J. Exs. 101 at 80-81; 102 at 32-35; 106; 125; 127 at 4-5.) At that time, Zotos's Waterloo operations consisted of packaging, warehousing, and shipping. (J. Exs. 101 at 80; 107 at 1.) Under a "plan of unification" approved by the respective Directors of Zotos and ECI, the companies entered into two agreements, effective January 1, 1946. (J. Exs. 102 at 22; 106.)

First, Zotos leased to ECI all of the Waterloo Plant's buildings, machinery,

⁷ Grace has set forth numerous proposed findings of fact to establish that Zotos and ECI were related companies with common ownership and some overlap of directors. Grace's proposed facts in this regard are supported by a preponderance of evidence. Nevertheless, the Court finds it unnecessary to recite them in detail here because Grace has not argued that these facts have any bearing on the question of Zotos's liability.

equipment, and fixtures. ECI took over all manufacturing operations at Waterloo and also assumed all plant maintenance. (J. Exs. 101 at 80-81; 102 at 32-35; 103, 105; P. Ex. 309 at 5; D. Ex. 507.)

Under a separate merchandise contract, ECI agreed to take over Zotos's packaging operations, with Zotos continuing to purchase the finishing materials ECI would need. ECI would formulate and package various products for Zotos, which Zotos would purchase at a fixed price in accordance with a Requirements Schedule. (SF ¶ 28; J. Exs. 101 at 80-81; 102 at 32-35; 105-06; 125-27; 129 at 1-6; 130.) Zotos had the right to inspect all finished goods, and to reject them if they did not meet agreed upon specifications. (J. Ex. 106 at 4-5.) After January 1, 1946, Zotos staffed only two activities at the Waterloo Plant: shipping finished products to its distributors and operating a salvage department. (SF ¶ 34.)

The leasing arrangement described above remained in place under successive agreements from January 1, 1946 until on or about July 30, 1954. (SF ¶ 29; D. Ex. 510 at 2-3; J. Exs. 101 at 92, 96; 102 at 42-43; 129.) Zotos retained its six-employee shipping department and two-employee salvage department at Waterloo until in or about February 1954, when these tasks, too, were assumed by ECI employees. (J. Exs. 108, 150, 155; Dutcher Dep. at 4:23-5:1, 9:1-10:6, 11:1-12:9, 15:12-16:18; Tr. at 595-600.) Thereafter, and through the remainder of the Disposal Period, ECI formulated, packaged, shipped, and salvaged products for Zotos.

C. ECI Purchases the Brewer Road Site

An ECI memo, dated May 18, 1950, notes that a parcel of property on Brewer Road was inspected and found to be "very well suited for a dumping ground for the plant." (J. Ex. 122.) ECI purchased the five acre parcel on or about June 23, 1950, and waste materials

from the Waterloo Plant were taken there from some unspecified date thereafter until some time in 1959. (J. Exs. 122; 124 at 4; 152 at 4.) In a letter to Zotos later that same year, ECI stated that “handling and disposing of your refuse” has been a considerable job over the years and “[i]t has been necessary for us to purchase this year a piece of property outside of town for this purpose.” (P. 309 at 5.)

During the ensuing Disposal Period, ECI manufactured products not just for Zotos, but for other private brand purchasers of beauty products as well, such as: Gilda Audrey, Proctor & Gamble, Sears Roebuck, Hudnut, Turner Hall, Ogilvie, Coty, Rubenstein, Lehn & Fink, Nestle, Deltex, Gini, Nair, and Pantene. (SF ¶ 33; Tr. at 608-09; P. Ex. 317; D. Exs. 517, 519, 525 at 3, 541, 546-48, 550, 552-53, 555, 560-62, 565.) In addition, it continued to engage in bulk chemical manufacturing. (Tr. at 588, 591; Wooden Dep. at 6:15-20; D. Ex. 512.) Sales reports generated in 1954 and 1956 show that bulk chemical production accounted for 45-55 percent of ECI’s total sales. The remaining sales came from packaged hair care and cosmetics products. Between 77-87 percent of the packaged good sales were to Zotos, with the remaining 13-23 percent sold to other private brand purchasers. (D. Exs. 517, 519, 555, 561.)

D. Zotos Sells the Waterloo Plant and Inventory to ECI

In a letter to Zotos, dated August 28, 1950, ECI discussed some of the reasons its operational costs, and thus its pricing for finished Zotos products, had increased. One cause was the cost of financing Zotos’s accounts, which were then in arrears. (P. Ex. 309 at 6-7.) The situation appears to have continued thereafter.

On or about July 30, 1954, Zotos sold to ECI the Waterloo Plant’s land, buildings, and improvements, all or most of the equipment used to formulate and package Zotos hair

care products, and all of the packaging materials and finished Zotos stock then located at the Waterloo Plant. (SF ¶¶ 31-32; J. Exs. 101 at 109-10; 102 at 48; 110 at 4; D. Ex. 508.) ECI credited the agreed-upon purchase prices against Zotos's indebtedness. (J. Ex. 102 at 48.) Zotos agreed to repurchase any of the finished stock and packaging materials that later became obsolete or unsalable through no fault of ECI. (J. Ex. 114; P. Exs. 313.)

After ECI began warehousing Zotos's product inventory, it charged Zotos for finished products as they were sold by Zotos to its distributors. (Myskiw Dep. 3/13/01 70:4-15.) ECI implemented "a system of purchasing, production planning, and inventory control" similar to one it then had in place for Gini, a private label purchaser, and had previously operated for Sears-Roebuck. (J. Ex. 151.) Under this system, ECI purchased the necessary raw materials and formulated and packaged product pursuant to Zotos's monthly Requirements Schedule, which listed the anticipated number of units Zotos expected to sell for each product. (*Id.*; P. Ex. 330.) ECI held the inventory of finished product on its books until it was sold by Zotos and shipped to Zotos's customer, at which time it billed Zotos for the product. (J. Ex. 151.) So long as Zotos purchased product in accordance with its Requirements Schedule, ECI assumed responsibility for inventory balances. If Zotos did not purchase the scheduled quantities, Zotos was responsible for inventory overstocks to the extent its purchases fell below its estimated requirements. (J. Ex. 146; P. Exs. 330; 334 at 9-10.)

E. The Handling of Off-Quality, Unusable, and Unsalable Zotos Products

At issue in this case is the handling of specific categories of waste materials generated at the Waterloo Plant. The Court begins by noting what is not in dispute.

Grace does not contend that Zotos is responsible for waste ECI may have

generated in the process of manufacturing salable goods for Zotos. Similarly, Grace does not claim that Zotos is responsible for formulated products intended for Zotos, but which were disposed of because they failed to meet quality control standards. An on-site quality control laboratory tested outgoing products. (J. Exs. 103, 155; DiCicco Dep. 11:13-12:3; Edington Dep. 8:12-15, 9:7-12; Tr. 628.) An ECI employee recalled, for example, participating in the disposal at Brewer Road of seven to eight hundred gallons of Zotos hair care products he identified as “off quality.” (Jeffers Dep. 7/8/99 23:1-24:10.) This same employee identified the wastes generated during the production of Zotos products as consisting largely of shampoos: “Shampoos are an emulsion. If the emulsion fails[,] you have two layers and that’s rejected. It becomes a waste.” (Jeffers Dep. 6/1/99 30:2-20.)

Even where Zotos products were distributed to customers, if they were later returned due to complaints about product performance, ECI was contractually obligated to take back the return and, depending on its age and condition, issue a credit to Zotos. (J. Ex. 106 at 5; P. Ex. 302.)

The question presented here is whether Zotos is liable for the disposal of two categories of materials: (1) merchandise Zotos’s customers returned to Waterloo for reasons other than unsatisfactory performance, and (2) inventory that became outdated or obsolete.

1. Returned Product

When a Zotos distributor⁸ sought to return products it had purchased, Zotos’s Sales Department decided whether it would authorize the return. If it did so, it also authorized the

⁸ Distributors also are referred to as “jobbers.”

Waterloo Plant to accept the return package; something the Plant could not do without Zotos's approval. (SF ¶¶ 43, 45; Myskiw Dep. 7/15/99 66:22-25, 117:22-118:19; Aunkst Dep. 36:6-37:23; P. Exs. 354; 389 at 8.) Upon their arrival at Waterloo, return packages were examined to confirm the contents were consistent with Zotos's authorization. (Myskiw Dep. 3/12/01 67:10-68:5.) After the packages were checked, they were sent on to the salvage area, staffed by Zotos employees until February 1954, and ECI employees thereafter. (SF ¶ 44; Edington Dep. 15:20-16:12; Wooden Dep. 29:4-9.)

a. Zotos Staffing

On this record, the handling of returned products was first addressed in the 1945 merchandise agreement between Zotos and ECI. As noted earlier, under that agreement, ECI was responsible for products it manufactured for Zotos that were returned by distributors due to unsatisfactory performance. (J. Ex. 106 at 5.) Where products were returned for any other reason permitted under Zotos's return merchandise policies, Zotos, which staffed its salvage operation until February 1954, would decide whether or not the goods would be sent to ECI for reconditioning. In such cases, ECI would recondition the products, return them to Zotos, and charge Zotos for the labor and overhead incurred in returning the products to salable condition. (*Id.*; J. Ex. 144 at 3.)

b. ECI Staffing

Three ECI employees—Jean Edington, Alice Sabatine, and Carol Wickum—all of whom worked in salvage after ECI began performing those tasks, testified about the procedures they followed in and after February 1954. Walter Myskiw, who began performing accounting duties pertaining to Waterloo factory production and Zotos inventory in 1956, testified as to how Zotos inventory was handled on the books of ECI and Zotos.

Zotos products that were sent back to Waterloo for other than performance reasons may have been returned because the jobber over-ordered, the product had been damaged, or it had become outdated. (Edington Dep. 15:6-14.) The purpose of the salvage department was to see that returned products were reworked where possible, by repackaging, relabeling, or correcting some other defect, so they could be returned to inventory and resold by Zotos. (Edington Dep. 11:3-13:6; see also, Aunkst Dep. 22:20-23:7 (salvage department got “the good out and put it back in the system”).) The salvage “forelady” would determine the age of the products based on an affixed code. (Tr. 631:17-633:19.) Depending on the reason for return, some products went to the lab for testing to determine whether they were salvageable. (Edington Dep. 11:19-12:3.)

After the returned products were assessed, the individual in charge of salvage noted their condition on a “returned goods report” so Zotos’s New York office could analyze the value of the returns and “the customer would get a read for the value of the returned materials.” (Wooden Dep. 29:10-30:17; Edington Dep. 16:18-17:19; Myskiw Dep. 3/12/01 63:22-65:20.) Zotos’s Sales Department then issued a credit to the jobber, based on the age and condition of returned materials. (Wooden Dep. 29:19-30:2; Myskiw Dep. 3/12/01 67:10-68:5.) The Sales Department also determined which products would be salvaged and which scrapped. (Myskiw Dep. 3/12/01 63:22-66:6.) For example, Zotos had a general policy of destroying products that were a year or more old, but would make exceptions if it determined the product was still salable. (*Id.* 111:16-112:4.) In addition, it would use information from the returned goods reports to assess whether salvage could be accomplished in a cost-effective manner. (Myskiw Dep. 7/15/99 185:3-24.) When Zotos determined products were salvageable, it paid ECI to recondition them. (Myskiw Dep.

3/12/01 67:10-71:12.) After returns were reconditioned and placed back in inventory, ECI would: (1) issue Zotos a credit for the additions to inventory, and (2) bill Zotos for the salary costs and payroll overhead incurred to return the product to salable condition. (Myskiw Deps. 3/12/01 68:12-71:2; 7/15/99 165:13-166:22; J. Ex. 106 at 5.) The reconditioning costs were separately billed at the end of each job because Zotos wanted to know “exactly what it cost them to salvage the material.” (Myskiw Dep. 7/15/99 166:23-167:11.)

When Zotos decided materials were unsalvageable and could be disposed of, ECI decided how and where to dispose of them. (Myskiw Dep. 7/15/99 174:12-176:23; Myskiw Dep. 3/12/01 186:18-188:7; Jeffers Dep. 6/1/99 85:6-20.) Salvage workers would loosen or remove the caps and either put the waste in barrels, or dump the material down the sink. (Edington Dep. 14:7-18; Sabatine Dep. 14:18-15:12; Wickum 16:12-16; Tr. 632:23-633:2, 646.) The caps were compromised, per Zotos’s policy, in order to prevent scavenging. (Tr. 646; Aunkst Dep. 15:13-16; Jeffers Dep. 7/8/99 20:15-21:15.) Unsalvageable returns not dumped down the drain were taken to Brewer Road for disposal. (Jeffers Dep. 6/1/99 55:21-59:5; Myskiw Deps. 7/15/99 186:2-6 and 3/12/01 66:7-21.)

As with the salvage operation, all witness testimony regarding disposal at Brewer Road relates to the period 1954 and later. (Aunkst Dep. 11:11-16:1, 27:22-28:16 (commenced employment in 1959); DiCicco Dep. 30:21-34:6 (employed in 1956); Dutcher Dep. 21:14-20 (testimony relates to period after ECI began staffing salvage operation); Jeffers Dep. 7/8/99 17:10:8-23, 6/1/99 35:14-25 (employed in 1954); Wooden Dep. 27:2-28:10 (employed in 1956).) From 1954 to the end of the Disposal Period, ECI’s shipping and receiving employees typically were responsible for collecting and transporting Plant trash to Brewer Road. (Aunkst Dep. 12:5-25; DiCicco Dep. 32:14-34:6; Jeffers Dep. 7/8/99

18:3-19:3). When Zotos authorized ECI to dispose of unsalvageable materials, the costs of handling and transporting those materials were allocated to Zotos. (Myskiw Dep. 7/15/99 125:18-24, 165:13-25, 186:3-187:23.)

A Zotos memo issued in 1963, after the Disposal Period, recommended that the company maintain the same return and salvage policies it had been using. Particular emphasis was placed on the destruction or diversion of unusable products, which would be “too liable to miscarriage” if not controlled by Zotos. (P. Exs. 356; 354 (merchandise had to be returned to Waterloo to ensure destruction).) A 1962 Zotos discussion of salvage policies confirmed that its Sales Policy governed what could be returned. It was further noted that, “if [product] is not returned [for possible salvage], the cost of destroying would be a consideration.” (P. Ex. 355 at 2.)

In its post-trial briefing, Zotos contends “no evidence has been established to conclusively determine whether ECI or [Zotos] had title to returned products . . . during and after the process of return, salvage and disposal.” (Docket No. 190 at 24.) The Court disagrees.

Based on the record presented at trial, Grace has shown, by a preponderance of evidence, that Zotos assumed and retained ownership of all products returned to Waterloo for reasons other than unsatisfactory product performance. Though the reasons for such returns might vary—damage to contents or packaging, lack of demand, etc.—implicit in all requests was the jobber’s determination that it was unable to sell the products. Zotos assumed control over the returns to assess their condition and determine whether, for its purposes, the goods could be salvaged or must be discarded. Regardless of whether the actual sorting and salvaging was carried out by Zotos’s employees or ECI’s, Zotos decided

the ultimate fate of the returns. The record contains no direct or circumstantial evidence to suggest that such ownership, once established, changed prior to the disposal of unsalvageable products.

2. Slow-Moving Inventory

When sales for particular items fell below Zotos's "requirements," it would first attempt to liquidate the slow-moving products at a reduced cost. (J. Exs. 147; 158; 161; P. Ex. 333 at 5.) If there was no market for these usable products, Zotos sometimes gave them to charity. (Myskiw Dep. 3/12/01 51:14-52:3.) Zotos's Sales Manager would decide when slow-moving or small volume products should be discontinued. (J. Ex. 161.)

In or about October 1954, ECI began preparing a monthly inventory report of Zotos products so Zotos could decide "what to do with the obsolete." (P. Ex. 315; Myskiw Dep. 3/12/01 50:8-23.) In March 1955, Zotos's General Sales Manager noted that his "implied" duties included working with management to assure that products and packaging elements did not become obsolete, and acting "to dispose of obsolete merchandise." (P. Ex. 118 at 2-3.) In 1957, Zotos created a Merchandise Cost Control Committee responsible for, among other things, "mak[ing] recommendations regarding over-stocked items and other items which are becoming inactive and tending toward obsolescence." (P. Exs. 322; 324.)

At the end of each year, Zotos's Sales Department would analyze the Waterloo inventory figures and the movement of products to determine if there were items that were then obsolete or that were likely to deteriorate before they could be sold. (Myskiw Dep. 7/15/99 173:14-174:11.) If so, Zotos gave the Waterloo Plant manager permission to dispose of those materials. (*Id.* 174:12-175:7; Myskiw Dep. 3/12/01 53:6-12.) ECI, too, reviewed Waterloo's inventory of Zotos products: "When inventories of [Zotos] finished

products become slow because demand has declined more than anticipated, it is policy to request [Zotos] to liquidate them.” (P. 334 at 9-10 (1958 ECI Sales Policies).) On at least one occasion, ECI sought permission to scrap products Zotos was in the process of liquidating because it needed space. (P. Exs. 335; 336 at 6-7.)

When Zotos advised ECI it could dispose of obsolete materials, ECI would bill Zotos for the cost of the products and materials it removed from inventory and, from at least 1957, also billed the costs associated with their disposal. (P. Ex. 334; Myskiw Deps. 7/15/99 177:7-178:9; 3/12/01 52:52:4-53:5.) Pursuant to Zotos policy, ECI employees disposing of Zotos products would attempt to break the containers or their caps to prevent scavenging. (Aunkst Dep. 12:5-13:25, 14:19-15:23; Jeffers Dep., 7/8/99, 20:23-21:24, 23:18-24:13, 25:2-22.)

Zotos maintains the evidence presented at trial is insufficient to determine which company was responsible for obsolete products during the Disposal Period, and further, that there is evidence to suggest ECI bore responsibility for all obsolete inventory, at least in and after 1954. The Court finds otherwise, based on the preponderance of evidence.

Two events in 1954 altered, in some respects, the relationship between ECI and Zotos. In February, ECI began staffing Zotos’s shipping and salvage operations at Waterloo, and on or about July 30, ECI purchased the Waterloo Plant and equipment from Zotos. Nevertheless, the formulation and handling of Zotos products remained largely the same. While ECI agreed to carry Zotos inventory on its books for a longer period of time—until Zotos actually sold the products—it continued to formulate products and manage inventory in accordance with requirements established by Zotos. To the extent sales did not meet projected levels, Zotos was required to purchase from ECI any resulting

outdated and obsolete products. (P. Exs. 313, 314.)

Zotos identifies two ECI memos, written in 1954 and 1956 respectively, as supporting its assertion that ECI was responsible for obsolete merchandise. The first involves ECI's decision not to purchase raw materials in large quantities, even though it would result in more favorable pricing, for fear of "being stuck with obsolete or slow items." (D. Ex. 526.) This decision certainly reflects ECI's understanding that, if it purchased raw materials and formulated finished goods in quantities greater than necessary to meet Zotos's requirements, it would be responsible for any resultant unusable or unsalable overage. The memo does not, however, state or imply that ECI agreed to accept responsibility for all obsolete Zotos inventory. To the contrary, it indicates an intent to avoid such an outcome entirely.

Two years later, ECI noted the adoption of a "new method whereby we produce economical runs [of Zotos products] which may take care of sales for a number of months." (D. Ex. 513.) Again, this decision does not state or imply that ECI agreed to assume responsibility for all obsolete inventory. Rather, it reflects ECI's ongoing balancing of production efficiencies against the risk of having to absorb losses attributable to excess production. (*Id.*, concluding that "this [method] is proper from the standpoint of economical production," but is detrimental to ECI's financial position.) The possibility that ECI production may, on occasion, have exceeded Zotos requirements, does not alter the fact that, throughout the Disposal Period, Zotos owned, and was financially responsible for outdated and obsolete merchandise not attributable to ECI's overproduction.

3. Disposal at Brewer Road

As previously noted, waste was deposited at the Brewer Road Site from some unspecified date after June 23, 1950 to some unspecified date in 1959. Grace maintains the proof presented at trial shows that Zotos's returned and obsolete products were dumped at Brewer Road both when Zotos employees staffed the shipping and salvage departments, from 1950 to February 1954, and when ECI performed those tasks from February 1954 through the remainder of the Disposal Period. Zotos contends Grace has failed to show that wastes for which Zotos was responsible were dumped at Brewer Road from 1950 through February 1954.

In support of its position, Grace points to ECI's August 28, 1950 letter to Zotos, which noted that the "handling and disposing of your refuse" has been a considerable job over the years and "[i]t has been necessary for us to purchase this year a piece of property outside of town [on Brewer Road] for this purpose." (P. 309 at 5.) While the letter does not explain what ECI classifies as Zotos's refuse, Zotos acknowledges that, beginning on January 1, 1946, ECI carried out all waste collection and disposal activities for the Waterloo Plant. (ZPPF⁹ 4 and 10.) This necessarily would have included the collection and disposal of waste accumulated by Zotos employees at the Waterloo shipping and salvage operations. This undisputed evidence is sufficient to conclude that ECI transported at least some of the waste from Zotos's shipping and salvage operations to Brewer Road beginning sometime after June 23, 1950 and until to February 1954.¹⁰ Zotos does not dispute that

⁹ Zotos's Proposed Findings of Fact, with supporting exhibits.

¹⁰ The Court has considered Grace's additional arguments, which it finds are not sufficient to lend support to this conclusion, and so they need not be discussed here.

ECI disposed of obsolete and unsalvageable Zotos products at Brewer Road from February 1954 through the end of the Disposal Period.

F. Grace's Purchase of, and Activity at, the Brewer Road Site

Grace, the current owner of the Brewer Road Site, acquired the property on or about December 28, 1978, when it purchased the assets of ECI. (SF ¶¶ 20-21; J. Ex. 163.) Grace did not use the Site as a landfill thereafter. (Tr. at 73.)

In 1983, the New York State Department of Environmental Conservation ("DEC") retained an environmental consultant to conduct a Phase I preliminary investigation of the Site. (SF ¶ 51; P Ex. 383.) J. Ex. 155 at 1.) Among the materials observed during the investigation were bottles and plastic tubes for hair care products, some of which bore Zotos product labels. (P. Exs. 383 at 7; 385 at 4; Williams Dep. at 70:9-71:2; Tr. at 67-70). The DEC's consultant, Recra Research, described the Site as a then inactive landfill where "[h]air care products from Zoto[s] Inc. which did not pass quality control standards were disposed of" and where ECI waste also was dumped. (P. Ex. 383 at HRS Cover Sheet for Brewer Rd. and Revised Appendix B). All told, Recra estimated that approximately 7000 drums, or 1750 tons of waste products, had been disposed of at Brewer Road. (*Id.* at 1, Rev. Appx. B at 2.) A site inspection revealed "bottles & tubes & drum [sic] scattered about the site," including "hair care products such as: wave lotions, shampoo, hair dye, perm. lotions, hair conditions, etc." (P. Ex. 383 § 3.2.)

On or about September 28, 1988, Grace entered into a consent order with the DEC, under which it was to develop and implement a remedial investigation, feasibility study, and, if necessary, a remedial program for the Site. (SF ¶ 53; P. Ex. 384 at 2.) Grace

retained an engineering firm to assess the physical and chemical characteristics of the Site as they related to potential effects on human health and the environment. (SF ¶ 54; J. Ex. 152 at 1.) The firm reported that soil samples taken at the Site contained antimony, arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, vanadium, zinc, cyanide and certain volatile and semi-volatile compounds at above background levels. (Id. at 48-49, Tables 4 and 5.) Sediment testing showed arsenic, barium, chromium, copper, iron, lead, manganese, nickel, vanadium, and zinc at concentrations above background levels. Groundwater samples included acetone, carbon disulfide and bi(2-ethylhexyl) phthalate at above the reported detection limits or guidance values, and iron, manganese and zinc at above background levels. (Id. at 58, 66-67, Tables 10-12.) After analyzing soil, sediment, ground water, and surface water, the investigating engineers found no indication that on-site chemicals posed a human health risk. (J. Ex. 152 at 43-68, 107.)

Thereafter, the DEC issued a Record of Decision, in March 1992, setting forth a remedy for the Site which required the installation of a clay cap, slurry wall, leachate collection trench and berm, as well as the construction of a fence around the perimeter. (SF ¶¶ 54-56; P. Exs. 385 and 386). Grace constructed the remedy, and continued to maintain the Site. (Tr. at 67, 84-87.)

G. The Test Pit Excavations

In June 2003, in the course of this litigation, Grace had test pits excavated to obtain a representative sample of materials deposited at the Site over time. (Tr. 359-66.) Containers were unearthed that bore product labels for the following Zotos hair care

products: Zotos Special Tubewave, Zotos Society Girl Tubewave, Sales Affiliates Concentrate Instant Neutralizer, Inecto Color Magic, Zotos American Girl Magic Crystal Neutralizer, Zotos Instant-Creme Tubewave, Zotos Tubewave Neutralizer, Zotos Instant Colorette, Zotos Instant Neutralizer, and Zotos Society Girl Instant On-the-Rod Tube Neutralizer.¹¹ (P. Exs. 392-25, -28, -34, -35, -39, -40, -47,-65, -120, -124; 394 at G0027088-91; Tr. 396.)

A number of containers did not have product labels, (P. Ex. 392-21, -22, -26, -27, -30, -36, -37, -96, -126), while others bore labels for hair care products formulated for private brands (P. Exs. 392-20; 394 at G0027085, G0027089, G0027091, G0027093, G0027094; D. Ex. 579 at 26, 29, 30, 40; Tr. 371-72, 394, 399, 473, 475-76, 494).

Dr. Kirk Brown, who was retained by Grace to evaluate the composition of waste at the Site, collected various jars, bottles, and tubes for analysis and for retention. (Tr. 359, 370-71, 390-91.) He testified that “[t]he vast majority of the waste was hair care products and cosmetics.” (Tr. 369:4-14, 372:1-11, 384:6-25, 387:25-388:24.) The ten samples Dr. Brown selected for laboratory analysis were packed on ice and sent to Ana-Lab in Kilgore, Texas. (Tr. 400, P. Ex. 397 at G0027064.) Items that were to be retained as physical samples were shipped to Dr. Brown’s facility in Texas where they were housed in a storeroom at room temperature. (Tr. 400, 507, 509.)

Dr. Brown also collected six samples of soil/sludge from areas that were beneath or surrounded by discarded containers. (Tr. 381-82, 386-87, 389-90.) These samples, too,

¹¹ Prior to and during the Disposal Period, Zotos sold products under the trade names Zotos, Sales Affiliates, Inecto, Marinello, and others. (J. Ex. 106, Ex. A; Tr. at 945.)

were sent to Ana-Lab for analysis.

In March 2004, eight packages of physical specimens stored at Dr. Brown's facility were shipped to Severn Trent Laboratory, in Buffalo, New York, for analysis. (Tr. 413; J. Exs. 186-93.) The specimens were shipped in a cooler, but were not packed on ice. (Tr. 509, 657-58.) The cooler did not include a trip blank, a laboratory-prepared sample that accompanies a shipment to monitor for potential contamination during transport. (Tr. 657:1-20.) The cooler did not have a custody seal, which would have indicated whether the cooler had been opened prior to arrival at the lab. (Tr. 657:21-658:17.) Severn Trent noted that the container was "received outside hold time"—*i.e.*, the specified time limit for conducting the requested analysis, calculated from the date the sample was gathered. (Tr. 658:18-659:5.) The maximum hold times for analysis for volatile organics, semivolatiles, and metals are six months or less. (Tr. 659:6-25.)

H. CERCLA Hazardous Substances and Zotos Formulas.

Grace maintains the totality of its proof is sufficient to show it is more likely than not that at least some Zotos products disposed at the Brewer Road Site include hazardous substances. It points to: Zotos formulas dated before and during the Disposal Period listing CERCLA hazardous substances as constituents, the existence of Zotos-labeled products at the Site, test results showing that two of the Zotos products found at the Site contained hazardous substances, and testing showing that soil from test pits where Zotos products were unearthed contained hazardous substances, as evidence that Zotos products containing copper, zinc, barium, lead, PAHs, xylene, phenol, phthalates, and acetone were disposed of at the Site. If true, "[a]ny amount of such substances is

sufficient to create liability.” B.F. Goodrich v. Betkoski, 99 F.3d 505, 525 (2d Cir. 1996). A plaintiff need not show that the defendant’s wastes were released, or that they caused the incurrence of cleanup costs, “but it must demonstrate that a defendant deposited [the particular] waste at the site in question.” DVL, Inc. v. General Electric Co., 811 F. Supp. 2d 579, 594 (N.D.N.Y. 2010) (citations omitted).

Zotos concedes “that waste, consisting of Zotos’ hair care products, was disposed at the Site in the 1950s.” (Docket No. 190 at 36.) But, it argues, Grace has not established the required link between its products and hazardous substances found at Brewer Road. Zotos attributes the site contamination to waste from ECI’s bulk chemical manufacturing, beauty products ECI manufactured for other private label customers, and ECI’s disposal of Zotos products for which ECI was responsible—*i.e.*, off-specification products and products returned for unsatisfactory performance.

1. The Formulas

Zotos does not possess every formula it developed prior to the end of the Disposal Period, but believes that the vast majority are accounted for. (Tr. at 910-17, 919.) The binders in which historic Zotos formulas are maintained also include formulas developed for private brand companies and for ECI. (Tr. 884-86, 908-10.) All formulas dated during and prior to the Disposal Period identify the constituents of the products. (SF ¶ 50.)

A Zotos employee testified that the existence of a Zotos formula does not necessarily mean that product was actually manufactured. (Tr. at 892-94, 905-07, 922-23, 948.) A good indicator that a formula was produced at some point is the presence of notations that the formula was reviewed, reissued, revised, or discontinued. (Tr. 905-06.)

2. Terminology

Prior to and during the relevant time period, Zotos and ECI used the term “cosmetics” to describe a broad array of products used by both professional salons, for hair styling, facials, massage, manicures, etc., and by the individual home consumer, such as face powders, foundation, soaps, and deodorants. (P. Ex. 304 (1945 Zotos price list for “cosmetic line,” including makeup, shampoo, scalp products, hand lotion, etc.); P. Ex. 401 (Zotos overview of these two categories of “cosmetics”); P. Ex. 333 (ECI notes that it seeks to retain the world’s “cosmetic” market for thioglycolic acid, the bulk of which was used to produce “cold permanent wave supplies in the ‘cosmetic’ field”).)

The trial record contains formulas from both categories of “cosmetics.” To avoid confusion hereafter, the Court uses the term “makeup” to refer to products applied to the face and body, such as foundation, powders, and lotions, whenever it is necessary to distinguish such items from hair care and hair styling products. The term “cosmetics” is used to refer to the full array of beauty products in the same manner used by Zotos and ECI.

3. Copper and Zinc

a. Makeup

Dr. Brown testified that copper and zinc are substances known to be components of cosmetic products. (Tr. 439-40.) Among the samples he collected and sent to Ana-Lab was an unlabeled makeup case containing an unidentified blue-colored material. The item was assigned sample number BR1-16. (Tr. 396-97, 462-64; P. Ex. 392-110.) Upon testing, the item was found to contain zinc and copper. (Tr. 400, 408; P. Ex. 397 at G0027064; D.

Ex. 579 at 17.) Dr. Brown also collected unlabeled translucent jars that he believed may have been used for creams, powders, or hair pomades. (Tr. 397-98, 442-43, 445, 447-48, 515-16.) Two jars, designated as samples BR1-3 and BR1-5 were analyzed at Ana-Lab and found to contain zinc and copper. (P. Ex. 392-96 and 99; P. Ex. 397 at G0027064; Tr. 405-07.) Dr. Brown selected these jars, and tested for metals, because the residue appeared to be some kind of powder, and face powders are “well known to have zinc in them and sometimes copper as colorants.” (Tr. 441:24-443:17, 447:4-448:5.) None of the containers Dr. Brown believed held makeup carried a Zotos label.

There are a number of Zotos makeup formulas dated in the 1930s and early 1940s that list zinc oxide as an ingredient. (Tr. 511, 550, 560-62, 564-69, 922, 940; J. Ex. 166 at D000087; P. Ex. 409 at 4.) Zinc stearate is a listed ingredient in a formula for white face powder base, which, in turn, was an ingredient in formulas for Zotos face powders dated in the 1940s. (Tr. 550, 554-55; J. Ex. 164 at D000026; J. Ex. 166 at D000089-94.) Several formulas dated during the Disposal Period, in the early 1950s, bear a Zotos brand name (Marinello) and list white base as an ingredient. (Tr. 945; P Ex. 410 at 131, 133, 137, 139, 142, 144, 150.) But each also includes a notation identifying the formula as a Sears Roebuck product—*i.e.*, a private brand. Two ECI employees—Romain Dutcher, who commenced employment at Waterloo in 1947, and Carol Wickum, who started there in 1954—testified that ECI did not manufacture any makeup products for Zotos at Waterloo during their tenures. (Tr. 608-609, 635-36.)

Dr. Brown testified that copper is a known ingredient in eyeshadow formulas. (Tr. 511-12.) No Zotos formulas for eyeshadow were presented at trial, and Dr. Brown did not

find any eyeshadow in his test pit investigation. (Tr. at 525.)

Although Zotos may well have sold makeup products containing copper and zinc at some time, Grace has not presented evidence sufficient to conclude that Zotos makeup products were manufactured at Waterloo during or immediately prior to the Disposal Period. Moreover, there is no evidence or testimony to suggest that Zotos makeup was returned to Waterloo or disposed of at the Site during the relevant time period. While numerous documents prepared during and outside the Disposal Period discuss the inventory, return, liquidation, salvage, and disposal of Zotos products, none mention makeup; they discuss hair products only. (See P. Exs. 302, 320, 324, 335, 336, 345, 347, 355, 359, 361, 378, 400; J. Exs. 124, 161.) To the extent ECI salvage department employees identified items sent to them for salvage, they named hair products only. (Edington Dep. 13:2-6; Wickam 16:7-17:8.) Similarly, Waterloo Plant employees who were aware of or assisted in disposing of products formulated for Zotos at the Site discussed hair care products only, not makeup. (Aunkst Dep. 12:21-13:4; DiCicco Dep. 32:22-34:6; Jeffers Dep. (7/8/99) 20:7-26:13; see also, Erskine Dep. 16:4-21 (Zotos was an ECI client “that put out . . . [ECI’s] hair care products under their name”).)

Grace maintains it is likely the unlabeled containers that tested positive for zinc and copper or may have been the source of zinc and copper found in test pits were, in fact, Zotos products. Even assuming that were the case, the record testimony indicates that products with no labels typically were those found to be off-quality. (Jeffers Dep., 7/8/99, 24:14-24.) Zotos did not own and was not responsible for the disposal of off-specification products.

The existence of Zotos makeup formulas, without more, is not sufficient to show it is more likely than not that, in the 1950s, Zotos makeup products were manufactured and stored at Waterloo, Zotos permitted customers to return makeup, and returned and obsolete Zotos makeup was disposed of at Brewer Road .

b. Hair Products

ECI used zinc in the manufacture of thioglycolic acid or ammonium thioglycolate, known as T-acid. (SF ¶48; D. Ex. 554.) In 1958, ECI described itself as the “world’s largest producer of T-acid” and noted that manufacturers and distributors of cold permanent wave supplies were the “largest consumers of T-acid.” (D. Ex. 525 at 2.) During the Disposal Period, ECI used T-acid in the production of certain Zotos hair care products. (SF ¶ 49.) Specifically, T-acid was a listed ingredient in Zotos formulas for wave products dated in the 1940s and 1950s. (Tr. 899:3-14; J. Ex. 165 at 0000044-45, 47, 49; J. Ex. 168 at 0000155, 159, 161-162, 164; J. Ex. 172 at 0000185, 186, 189-196, 199-201; J. Ex. 173 at 0000209-211, 214-220, 236, 238, 252, 254-58, 268.) As noted, tubes of various Zotos wave products were removed from the test pits. This evidence is sufficient to conclude that Zotos products containing zinc were disposed at Brewer Road.

Dr. Brown described copper as “present but not prevalent” in the Zotos formulas he reviewed. (Tr. 433.) He testified that copper was not used in neutralizers, cold waves, or shampoos, and did not appear in the formulas for Zotos hair coloring and other Zotos hair products found in the test pits. (*Id.* 433-36, 458-60, 465, 467, 468, 470, 474, 478, 491-94, 521-22, 525-26.) The exhibit includes only one Zotos formula, for “Sales Affiliates Peroximeter Liquid,” listing copper sulfate as an ingredient. (P. Ex. 409 at 3.) The formula,

dated 1946, includes a notation indicating it was originally developed in 1939. Assuming this is a hair care product, no labeled containers were retrieved from the test pits and there is no evidence or testimony as to whether or when this formula was manufactured and sold.

In sum, while there is one Zotos formula that contains copper, and copper was found at the Site at above background levels, Grace has not come forward with sufficient evidence from which the Court can conclude it is more likely than not that this particular product was manufactured, was returned and/or became obsolete, and was disposed of at the Site in the 1950s.

4. Barium

The record includes a formula for White Pancake Base 5% Barium Sulphate, dated March 1943. (J. Ex. 164, D000028.) The formula has been identified as a premix, as opposed to a finished product. (Tr. 514, 552-53.) There are no notations on the formula to indicate it likely was produced, nor does any Zotos product formula on record include this premix as an ingredient. Moreover, because the formula itself does not contain any brand name, it is unclear whether this premix was developed for Zotos or a private label.

Thus, Grace has not shown by a preponderance of evidence that Zotos products containing barium were disposed of at the Site.

5. Phthalates

a. Product Containers

The remedial investigation report, prepared by O'Brien & Gere Engineers, identifies plastic containers as a likely source of the phthalate compounds found in its environmental

samples.¹² (J. Ex. 152 at 48.) That testing showed the presence of diethyl-phthalate, di-n-butyl-phthalate, di-n-octyl-phthalate, and bis(2-ethylhexyl) phthalate. (Id. Tables 4 and 11.) Dr. Brown also testified that phthalates are a common constituent in plastics and he would expect plastic tubes found at the Site, including those bearing Zotos labels, to be a source of phthalates in the environment. (Tr. 512-13.) He did not have any plastic containers analyzed. (Tr. 526:3-7.)

Zotos takes the position that Dr. Brown's testimony pertaining to the composition of plastics used during the relevant time period is insufficient, on its own, to support the conclusion that Zotos tubes contained phthalates. Of note, of course, is that O'Brien & Gere previously reached the same conclusion. Moreover, the Second Circuit has found that probabilistic testimony, such as that offered by Dr. Brown, is sufficient to support factual findings where the testimony stands largely uncontroverted. Betkoski, 99 F.3d at 525 (noting environmental science is ill-suited to lead a factfinder to definitive answers, dealing as it does in statistical probabilities). Here, Zotos did not offer countervailing evidence; it simply urges Dr. Brown should have conducted laboratory analysis to confirm what his education and knowledge led him to conclude——*i.e.*, that phthalates “were ubiquitous in the plastic industry” during the Disposal Period and plastics of that age typically contained phthalates. (Tr. 525.)

The Court finds the expert testimony and evidence is sufficient to show it is more likely than not that Zotos plastic containers found at the Site contain phthalates.

¹² The gloves, plastic rope, and coolers used to collect and transport samples were identified as another likely source. (Id. at 48, 67.)

b. Hair Products

Grace has identified a number of Zotos hair coloring formulas, dated in the late 1950s, that list Palatimol M and/or Phthalopal PP as an ingredient(s). (P. Ex. 408, Formula Nos. 2500, 2509, 2510, 2511, 2512, 2515, 2519, 2520, 2537, 2539.) Palatimol M is a trade name for dimethyl phthalate. (Tr. 558:11-13.) This particular phthalate was not detected in the environment during the remedial investigation or in Dr. Brown's samples. (J. Ex. 152 at 46, 48, 58, Tables 4 and 11; Tr. 559.) Phthalopal PP is a phthalic resin that "will evolve phthalic esters in the landfill if you put it in there"—*i.e.*, will evolve to a solid form. (Tr. 558:13-18, 522:23-524:1.) There is no testimony or evidence linking Phthalopal PP to any of the four phthalates found at the Site.

While a hazardous substance need not have been released at a disposal site for liability to attach, there is another factor weighing against a finding of liability relating to these formulas. The record contains no evidence to suggest that products compounded from these particular formulas were disposed of at the Site. These particular hair coloring formulas are all dated between November 3, 1958 and May 1, 1959. There is no basis upon which the Court can reasonably conclude that formulas developed in this time period would have been tested, put into production, shipped out, returned, and salvaged or declared obsolete prior to the end of the Disposal Period, sometime in 1959.

Diethyl phthalate, which was found in the environment at the Site, was reported by Severn Trent for one item selected for analysis from a specimen bag containing eight "assorted tubes"—BR1-26. (Tr. 475, 995; P. Ex. 397 at G0027064.) Of three tubes photographed in July 2003, none had caps, and at least one tube was for a private brand

(non-Zotos) product. (D. Ex. 579 at 29-31.) The tube selected for analysis was labeled “Zotos Society Girl Tubewave Instant On-the-Rod Neutralizer,” and is identified as Sample BR1-26(A). (Tr. 995:13-996:11.) The record does not include any formula bearing that precise name, but does include numerous Zotos formulas for neutralizers dated throughout the 1950s, some of which include the name “Society Girl.” (J. Ex. 172 at D000197, 204, 207; J. Ex. 173 at D000212, 221-27, 240, 243-46, 253, 262, 269; J. Ex. 174 at D000288, 298.) Phthalates are not a listed ingredient in any of these neutralizer formulas. (*Id.*; Tr. 996.)

Severn Trent reported the following values for diethyl phthalate in its analysis of BR1-26(A): (i) sample value, 3000J, (ii) reporting limit, 10000. (J. Ex. 192 at 11.) The letter “J” after a sample value is a qualifier that “[i]ndicates an estimated value” [where] the data indicates the presence of a compound that meets the identification criteria but the result is less than the [reporting] limit but greater than zero. (*Id.* at 7.) Severn Trent also analyzed the contents of a product tube from sample BR1-13. (J. Ex. 188.) That specimen bag contained two tubes of “Zotos Society Girl Tubewave Instant On-the-Rod Neutralizer.” (P. Ex. 394 at G0027093; D. Ex. 579 at 14.) Although the caps were missing, the tubes were not intermixed with other product types and brand names. (D. Ex. 579 at 14.) When the contents were analyzed, diethyl phthalate was not detected. (J. Ex. 188 at 11.) In short, this split sample did not verify the results for BR1-26(A). (Tr. 998:3-999:3.)

Grace has succeeded in showing that Zotos plastic containers at the Site contain phthalates. But it has not shown, by a preponderance of evidence, that Zotos hair care products containing phthalates were disposed there.

6. Benzoic Acid

During the remedial investigation, benzoic acid was found in fill samples at the Site. (J. Ex. 152 at 46, Table 4.) Zotos's records include specifications for a raw material called Lamepon 4C, supplied by Touraine Chemical Company. (P. Ex. 306.) There are three specification sheets for Touraine's Lamepon 4C, dated November 28, 1944, December 1947, and October 1948, respectively. (P. Ex. 408¹³; P. Ex. 306 at Z01249; P. Ex. 408.) The 1944 and 1947 specifications list formaldehyde and benzoic acid as preservatives. The 1948 specification lists formaldehyde only.

Lamepom 4C is listed as an ingredient in many Zotos cold wave formulas dated 1949 to 1955. (J. Ex. 172 at D00185-89, D000192-96, D000198-201; J. Ex. 173 at D000233, 236; P. Ex. 408, formula numbers 2342A, 2343A; Tr. 514-15, 931, 933-39.) Tubes of Zotos wave products were found in Dr. Brown's test pits.

Benzoic acid was reported for one item selected for analysis by Severn Trent. Sample BR1-20 consists of two small glass bottles with partial labels, one of which identifies the contents as "Lusterol." Dr. Brown believes the bottles contained some kind of wave set lotion, but was unable to match the partial label with a particular Zotos formula. (Tr. 467-68, 524-25.) Zotos's expert witness, Andrew Barber, could not rule out the possibility that BR1-20 was a cold wave product containing Lamepon which, in turn, may have contained benzoic acid and/or formaldehyde. (Tr. 993-94.)

Severn Trent reported the following values for benzoic acid in its analysis of BR1-

¹³ This voluminous compilation of formulas does not contain page numbers or Bates stamps to aid in identification. The Court has reviewed the entire exhibit, and confirmed the accuracy of any references to it.

20(A): (i) sample value, 9600J, (ii) reporting limit, 50000. (J. Ex. 190 at 11.) In the course of testing this sample for semivolatile organics, including benzoic acid, the lab noted the “presence of a large unidentified chromatographic peak.” (Id. at 5.) Such a peak may lead to misidentification of a compound. (Tr. 701-703, see also, Tr. 75.) No split sample was tested for the presence of benzoic acid. (Tr. 998:6-8.)

Zotos maintains that samples sent to Severn Trent were out of date and not handled properly, and that the laboratory testing was flawed. Even assuming the Severn Trent analysis of BR1-20 is unreliable, the remaining evidence is sufficient to conclude that Zotos products containing benzoic acid were disposed of at the Site. Benzoic acid was used as a preservative in a Zotos cold wave ingredient, numerous tubes of cold wave products were observed at the Site, and soil samples taken near those products contained benzoic acid.

7. Phenol, and Pyrene and Polyaromatic Hydrocarbons (“PAHs”)

Zotos formulas for scalp pomades, dated 1940 to 1947, include phenol and petrolatum as ingredients. (Tr. 513-14, 555; J. Ex. 166 at D000071-74.) Petrolatum contains PAHs such as benzoate pyrene. (Tr. 491-92, 555.) Pyrene and benzo[a]pyrene were detected in soil samples at above background levels during the remedial investigation. (J. Ex. 152, Tables 4 and 13a.) Phenol was not reported in the remedial investigation, but was detected in soil samples from Dr. Brown’s test pit excavations. (J. Ex. 152; Tr. 439:3-19; 450:20-451:19.)

Rushi Tasker, Zotos’s vice-president, research and development, testified that scalp pomades are not hair care products and fall within a different category. (Tr. 926.)

Documents prepared prior to, during, and after the Disposal Period pertaining to the production, inventory, return, liquidation, salvage, and disposal of Zotos hair care products make no reference to scalp pomades. (See, e.g., P. Exs. 302, 320, 324, 335, 336, 345, 347, 355, 359, 361, 400; J. Exs. 124, 161.) Waterloo Plant employees who were aware of or assisted in disposing of products formulated for Zotos at the Site did not identify scalp pomades as being among the wastes. (Aunkst Dep. 12:21-13:4; DiCicco Dep. 32:22-34:6; Jeffers Dep., 7/8/99, 20:7-26:13.) The only labeled pomades found in the test pits were for a private brand—Gilda Audrey. (Tr. 450:8-19.)

Assuming Zotos scalp pomades were manufactured at Waterloo within the relevant time period, there is no evidence to suggest that Zotos authorized returns of pomades, or that pomades were declared obsolete during that time. The testimony suggests it is more likely than not that the unlabeled jars Grace contends may have contained pomades were off-specification products. In sum, the totality of circumstances does not support a conclusion that scalp pomades for which Zotos was responsible were disposed at Brewer Road.

8. Acetone

In the remedial investigation, acetone was detected at above background levels. (J. Ex. 152 at 46, 48, Table 3.) O'Brien & Gere Engineers identified residue from a chemical process as the likely source for at least some of this contaminant. (Id. at 48.)

No Zotos formulas for shampoos, conditioners, waves, or neutralizers from the 1940s and 1950s list acetone as an ingredient. (Tr. 452-53, 900-901.) Three ECI Waterloo employees, all of whom commenced employment in 1956, confirmed that acetone was not

used in compounding Zotos hair care products from 1956 to the end of the Disposal Period. (DiCicco Dep. 27:11-14; Erskine Dep. 81:11-16; Wooden Dep. 24:24-25:2.)

Dr. Brown testified that he saw Zotos formulas for stain removers with acetone as a listed ingredient. (Tr. 514.) The record does not include any such formula dated prior to or within the Disposal Period. Dr. Brown also stated that acetone is an ingredient that can be found in fingernail polish and in polish remover. He found no such products at the Site during his investigation. (Tr. 453.)

Grace has not shown, by a preponderance of evidence, that Zotos products disposed of at the Site contained acetone.

9. Sodium

Sodium was detected in the remedial investigation at above background levels. (J. Ex. 152, Table 5.) Grace contends that Zotos used sodium phosphate dibasic as an ingredient. Grace has not presented any formula dated prior to or during the Disposal Period, or any testimony involving the Disposal Period, to support such a conclusion.

10. Lead

Lead was detected in amounts above background levels in the remedial investigation. (J. Ex. 152, Table 5.) The record includes one 1947 formula for protective hand cream listing titanium dioxide AMO as an ingredient. (P. Ex. 306 at Z01226.) Titanium dioxide AMO contains lead. (Tr. 559.) The formula does not include a company or brand name, and it may or may not have been developed for Zotos. There are no notations on the formula indicating that it ever went into production. As is the case with scalp pomades and makeup, the documents and testimony relating to Zotos inventory, sales, salvage, and

disposal make no reference to hand creams.

The existence of a single formula containing lead, without more, is not sufficient to show that Zotos products containing lead were disposed of at Brewer Road.

I. Arranging to Dispose or to Transport for Disposal

Grace contends that Zotos is liable as an arranger for three distinct reasons: (1) it set policies and made the crucial decision that products had become waste and should be disposed of, (2) it was involved in the timing, manner, or location of disposal, and (3) it owned the products disposed of and controlled the process by which they were classified as wastes.

Zotos, on the other hand, argues there is “no proof in the trial record that [it] intended to dispose of hazardous substances at the Brewer Road site, or that it took any steps to do so.” (Docket No. 222 at 1.) It maintains its employees did not collect, transport, or dispose of any wastes, and characterizes its actions pertaining to returned and obsolete products as sales and marketing decisions, not disposal decisions. Zotos urges its decision making was limited to determining which products it wished to purchase from ECI’s inventory and whether returned products could be salvaged for resale. At most, it claims, its decisions led ECI to treat certain products as wastes, at which point ECI decided whether, how, when, and where to dispose of the materials. In short, Zotos maintains it may have created wastes, but it did not handle them or make arrangements to have them disposed of. By its arguments, Zotos suggests liability cannot be found where the entity that created a waste: (1) simply abandoned the waste materials, (2) was not involved with

the physical act of disposal, and (3) did not direct where the waste should be taken.¹⁴

The Supreme Court most recently considered the scope of “arranger liability” in Burlington Northern and Santa Fe Ry. Co. v. United States, 556 U.S. 599, 129 S. Ct. 1870, 173 L. Ed. 2d 812 (2009). The Court was asked to determine whether Shell Oil Company, which sold bulk chemicals to distributors, was liable as an “arranger” due to its knowledge that minor, accidental spills occurred at buyers’ facilities when its products were unloaded from common carriers. While recognizing that such knowledge may provide some evidence of intent, the Court observed that “knowledge *alone* is insufficient to prove that an entity ‘planned for’ [a] disposal.” *Id.* at 612 (emphasis supplied). To be liable as an arranger, it reasoned, “Shell must have entered into the sale . . . with the intention that at least a portion of the product be disposed of during the transfer process by one or more of the methods described in § 6903(3).” *Id.* Because the facts supported the conclusion that any disposal had “occurr[ed] as a peripheral result of the legitimate sale of an unused, useful product,” the Court found Shell did not arrange for the disposal of hazardous waste. *Id.* at 613.

Key, under Burlington Northern, is ownership of the product at the time a sale is entered into. United States v. Lyon, 2007 U.S. Dist. LEXIS 94329, at *19 (E.D. Cal. Dec. 14, 2007) (citing underlying Burlington Northern decision, 502 F.3d 781 (9th Cir. 2007)). Beyond that is the need, in all but the clearest of cases, to examine the alleged arranger’s intent:

¹⁴ Other of Zotos’s arguments—*e.g.*, it did not own and was not responsible for any returned or obsolete products, there is no evidence showing that returned or obsolete products were disposed of at the Site prior to February 1954—already have been addressed and require no further discussion.

It is plain from the language of the statute that CERCLA liability would attach under § 9607(a)(3) if an entity were to enter into a transaction for the sole purpose of discarding a used and no longer useful hazardous substance. It is similarly clear that an entity could not be held liable as an arranger merely for selling a new and useful product if the purchaser of that product later, and unbeknownst to the seller, disposed of the product in a way that led to contamination. Less clear is the liability attaching to the many permutations of "arrangements" that fall between these two extremes—cases in which the seller has some knowledge of the buyers' planned disposal or whose motives for the "sale" of a hazardous substance are less than clear. In such cases, courts have concluded that the determination whether an entity is an arranger requires a fact-intensive inquiry that looks beyond the parties' characterization of the transaction as a "disposal" or a "sale" and seeks to discern whether the arrangement was one Congress intended to fall within the scope of CERCLA's strict-liability provisions.

Although we agree that the question whether § 9607(a)(3) liability attaches is fact intensive and case specific, such liability may not extend beyond the limits of the statute itself. Because CERCLA does not specifically define what it means to "arrang[e] for" disposal of a hazardous substance, we give the phrase its ordinary meaning. In common parlance, the word "arrange" implies action directed to a specific purpose. Consequently, under the plain language of the statute, an entity may qualify as an arranger under § 9607(a)(3) when it *takes intentional steps to dispose of a hazardous substance*.

556 U.S. 599, 609-11, 129 S. Ct. 1870, 173 L. Ed. 2d 812 (2009) (internal citations omitted) (emphasis supplied).

"To determine whether an arrangement for disposal of a hazardous substance exists, courts have variously assessed the nature of the transactions between the parties and have ruled accordingly." New York v. Solvent Chemical Co., Inc., 218 F. Supp. 2d 319, 337 (W.D.N.Y. 2002).

1. Arranger Liability and Returned Product

As fully set forth above, Zotos and ECI entered into merchandising contracts whereby ECI would compound and package Zotos hair care formulas. Zotos then sold its

new and useful products to distributors in the beauty industry. But, unlike the clearcut Burlington Northern example above, the disposal of unsold or unwanted products was not carried out unbeknownst to Zotos by distributors or end-users. Rather, Zotos agreed to buy back products that were damaged in shipping, or that performed unsatisfactorily,¹⁵ or that distributors were unable to sell. Zotos required its distributors to first request an authorization to return products and then required that they ship authorized returns to the Waterloo Plant for inspection and processing. Through its return policies, Zotos intended to extract the maximum value from those unwanted products and minimize their waste by salvaging returned items for resale where possible. It knew, however, that at least some portion of the material would remain unsalvageable waste. In sum, Zotos did not merely put its products into the stream of commerce, an act that by itself is not sufficient to impose arranger liability. See Solvent Chemical, 218 F. Supp. 2d at 337 (W.D.N.Y. 2002) (citations omitted). Rather, its transactions with distributors included an arrangement for the return and, if necessary, the disposal, of unwanted or unuseable products.

Early in the Disposal Period, Zotos's own employees staffed the Waterloo salvage operations and separated products that were salvageable from those that were not. Zotos later contracted with ECI to perform those tasks, but Zotos continued to decide which products it did and did not want ECI to salvage. While Zotos maintains it made no arrangements for the disposal of salvage wastes at Brewer Road, and simply abandoned unwanted material at the Waterloo Plant, the record suggests otherwise. From the onset of the Disposal Period to on or about July 30, 1954, ECI performed all maintenance at the

¹⁵ It already has been determined that ECI agreed to accept responsibility for returned off-quality merchandise.

Waterloo Plant, including all waste disposal, pursuant to a lease agreement between Zotos and ECI. Thus, Zotos intended that, when it “abandoned” waste from its salvage operations at the Waterloo Plant it then owned, its lessee would dispose of that waste. Indeed, ECI purchased the Brewer Road Site to use as a dumping ground for the Waterloo Plant and, in particular, Zotos’s refuse. Zotos knew of the purchase and the reason for it. When Zotos sold the Waterloo Plant to ECI and paid ECI to accept its customer returns and perform salvage services for Zotos’s benefit, those services necessarily included the disposal of whatever could not be salvaged. Zotos employees traveled to Waterloo on a regular basis to observe and assess production and salvage operations related to its products.

A factually analagous case is relevant to the question of Zotos’s arranger liability here. Cadillac Fairview/California, Inc. v. Dow Chemical Co. is a CERCLA action arising from the United States’ takeover of the rubber industry in World War II for the purpose of ensuring a supply of synthetic rubber to the military. 1997 U.S. Dist. LEXIS 3083 (C.D. Cal. 1997). The case involves liability for waste generated at facilities owned by the Government and operated by private companies, including a styrene plant, a butadiene plant, and two copolymer plants. One question the district court was asked to address was whether the United States was liable, as an “arranger,” for Dow Chemical’s disposal of hazardous substances at the styrene plant Dow had operated. *Id.* at *3-4.

Small quantities of styrene used by the copolymer plants were returned to the styrene plant for repurification and reuse, a process that yielded some waste product which Dow then disposed of. *Id.* at *5. During the relevant time period, the United States decided where and how the styrene would be repurified, analyzed the efficiency of the repurification

process, required that the copolymer plants return styrene per its direction, and established the refunds those plants would be credited for returned product. *Id.* at*20-22. The copolymer plants were required to request a transfer order from the Government before shipping the material, which order specified the amount to be shipped. *Id.* at *24. The Government also established specifications governing what could be returned. *Id.* at 26-27. It did not tell Dow what to do with waste from the repurification process, but was aware that Dow was disposing of it on-site. On these facts, the district court found the United States liable as an “arranger” with respect to the disposal of waste materials from the reconditioning of styrene.

This Court likewise finds that Zotos is liable as an “arranger” for the disposal of hazardous wastes from its product salvage operations, even though it was not physically involved in the transport of waste, and did not direct where the waste should be disposed. See, e.g., California Dep’t of Toxic Substances Control v. ALCO Pacific, Inc., 508 F.3d 930, 935 (9th Cir. 2007) (expressly rejecting argument that defendant could not be held liable as arranger because it did not control eventual disposition of waste). At every step preceding actual disposal, Zotos owned and was responsible for returned product, set policies governing returns, and made all decisions relative to the ultimate fate of returned goods. These facts are more than sufficient indicia of Zotos’s intent. American Int’l Specialty Lines v. United States, 2010 WL 2635768, at *27-28 (C.D. Cal. June 30, 2010) (finding government liable as arranger where it delivered rocket engines to third party for refurbishing and recycling, and decided what portions would be recycled or discarded).

2. Arranger Liability and Obsolete Inventory

In contrast to returned products, obsolete products are those that were never sold in the first instance. They were taken from inventory and disposed of precisely because they could not be sold in sufficient volume or within a reasonable period of time.

Throughout the Disposal Period, Zotos determined the amount of inventory it wanted on hand for each of its products. It monitored inventory levels and its monthly sales to determine whether demand for its products was changing. From the beginning of the Disposal Period until February 1954, Zotos employees manned the Waterloo Plant warehouse and shipping operations. If Zotos determined it had little or no market for particular products in inventory, it decided when they should be eliminated from inventory and left for ECI to dispose of. In and after February 1954, when ECI employees performed warehouse and shipping operations for Zotos, Zotos continued to decide how much inventory should be maintained and when there was no longer a marketable use for particular products. It informed ECI of its decisions and ECI then disposed of the obsolete.

ECI did not purchase Zotos's obsolete products, or put them to any marketable use. Zotos "abandoned" such products to ECI only after deciding it had no viable use for them, such as liquidation at a reduced cost or donation to charity. Pursuant to Zotos policy, caps and containers were broken to prevent scavenging. In short, Zotos took affirmative steps to ensure that its unwanted inventory did not remain in a useful state, but instead, became waste.

The facts presented at trial are more than sufficient indicia of Zotos's intent to arrange for the disposal of its obsolete products. See United States v. Pesses, 1994 U.S.

Dist. LEXIS 18684, at *5-6 (W.D. Pa. 1994) (government liable as an arranger for disposal of obsolete materials containing hazardous substances).

V. CONCLUSION

Defendant Zotos International, Inc. is liable under 42 U.S.C. § 9607(a)(3) as a person who arranged for disposal of hazardous substances at Brewer Road, consistent with the foregoing discussion. The questions of necessary response costs and allocation of damages among Grace and Zotos will be addressed in future proceedings.

SO ORDERED.

Dated: September 26, 2013
Buffalo, New York

/s/William M. Skretny
WILLIAM M. SKRETNY
Chief Judge
United States District Court